



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,225	11/08/2000	Keith Luker	1511-00	1140
22469	7590	04/08/2005	EXAMINER	
SCHNADER HARRISON SEGAL & LEWIS, LLP 1600 MARKET STREET SUITE 3600 PHILADELPHIA, PA 19103			SORKIN, DAVID L	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/708,225

Applicant(s)

LUKER, KEITH

Examiner

David L. Sorkin

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,21-33,36-46 and 48-54 is/are pending in the application.
- 4a) Of the above claim(s) 21-33 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 36-46 and 48-54 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the office action mailed 23 March 2004 is withdrawn.
2. The amendment filed 20 December 2004 is entered.

Drawings

3. The drawings are objected as failing to comply with 37 CFR 1.84(p)(1) which states "Reference characters ... must not be ... enclosed within outlines, *e.g.*, encircled". See Figs. 6a and 6b, which include numerous encircled reference characters.
4. Fig. 6b is also objected as failing to comply with 37 CFR 1.84(h)(3), which states "The ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view". Therefore in Fig. 6b, the sectional line "V – V" should instead be 6a – 6a.
5. The drawings are also objected to under 37 CFR 1.84(e) due to stray marks (copy machine marks) in Figs. 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, 5a, 5b, 7a and 7b.
6. The drawings are objected to under 37 CFR 1.84(l) due to poor quality of lines, numbers and letters.
7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

8. In accordance with the drawing corrections discussed above, all references to sectional line "V—V" should be changed to 6a - - 6a. See for example page 5 line 8.

Allowable Subject Matter

9. Claims 3, 36-46 and 48-54 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: In the embodiment of Fig. 4a and Fig. 4b of the instant invention, an axially disposed inlet channel "First inlet channel 11" is in fluid communication with "outlet channel 12". Both channels are bounded on one side by flight/blocking wall 26 which is capable of substantially preventing flow therepast. As best seen in Fig. 4(b), starting at first inlet channel 11 and going counter-clockwise about the circumference to outlet channel 12, there are many so-called cross axial pumps 10 and intermediate channels. As seen in Fig. 4(b) the flight/blocking wall 26 is higher (extend more radial outward) than the pumps and channels, thus flight/blocking wall 26 is capable of substantially

Art Unit: 1723

preventing flow, while material can flow from first inlet channel 11, passing across many intermediate channels and cross axial pumps, to outlet channel 12. The closest prior art, Le Roy (US 3,486,192), does not disclose a blocking wall that substantially prevents flow, in combination with the claimed channels and pumps which permit flow. Whereas the instant invention has three "height" levels (channel, pumps and blocking walls) to provide such a capability, Le Roy ('192) only has two "height" levels (channels and lands) and therefor does not have such a capability. As applicant/appellant points out the brief, it is not reasonable to consider different ones of identical lands "16" to be both a blocking wall that prevents flow and a pump that permits flow.

Conclusion

11. As this application is in condition for allowance except for the above formal matters, prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.


A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David L. Sorkin
Primary Examiner
Art Unit 1723

DLS